

ANALYTICAL RESULTS – OBJECT 4

PARTNER:	UNITO - CCR
TYPE OF WORK:	Mural (Object 4)
COUNTRY:	Italy
CITY:	Turin
ADDRESS:	Via Spalato 59
OWNER / CUSTODIAN:	Digital Group S.r.l.
ARTIST:	Truly Design
TITLE OF THE WORK:	No title
YEAR OF EXECUTION:	2010
MATERIALS:	Mixed painting on plaster

SAMPLING POINTS LOCATION



TABLE OF ANALYTICAL RESULTS

	Name of the sample	Original materials	No original materials	Pigments / dyes		Organic binders		Type of support*		Other**	
				Identification methods	Results	Identification methods	Results	Identification methods	Results	Identification methods	Results
1	Background white paint layer	x		ATR-FTIR SEM-EDS	Calcite, quartz, Ti white	ATR-FTIR	Possibly styrene-acrylic				
2	Cross section	x									
3	Cross section	x									
4	Shiny black paint layer	x		ATR-FTIR	Silicates	ATR-FTIR	Alkyd				
5	Salts	x								FTIR-ATR	Organic contamination
6	Red-orange paint layer	x		ATR-FTIR	Quartz	ATR-FTIR Py-GC/MS	Styrene-modified alkyd				
7	Dark red paint layer (applied by brush)	x		ATR-FTIR SEM-EDS	Silicates, Barite, Ti white, possibly PR 48	ATR-FTIR	Alkyd				
8	Dark red paint layer	x		ATR-FTIR	Silicates	ATR-FTIR Py-GC/MS	Styrene-modified alkyd				
9	Cross section	x									
10	White paint layer	x		ATR-FTIR SEM-EDS	Quartz, Ti white	ATR-FTIR Py-GC/MS	Styrene-modified alkyd				

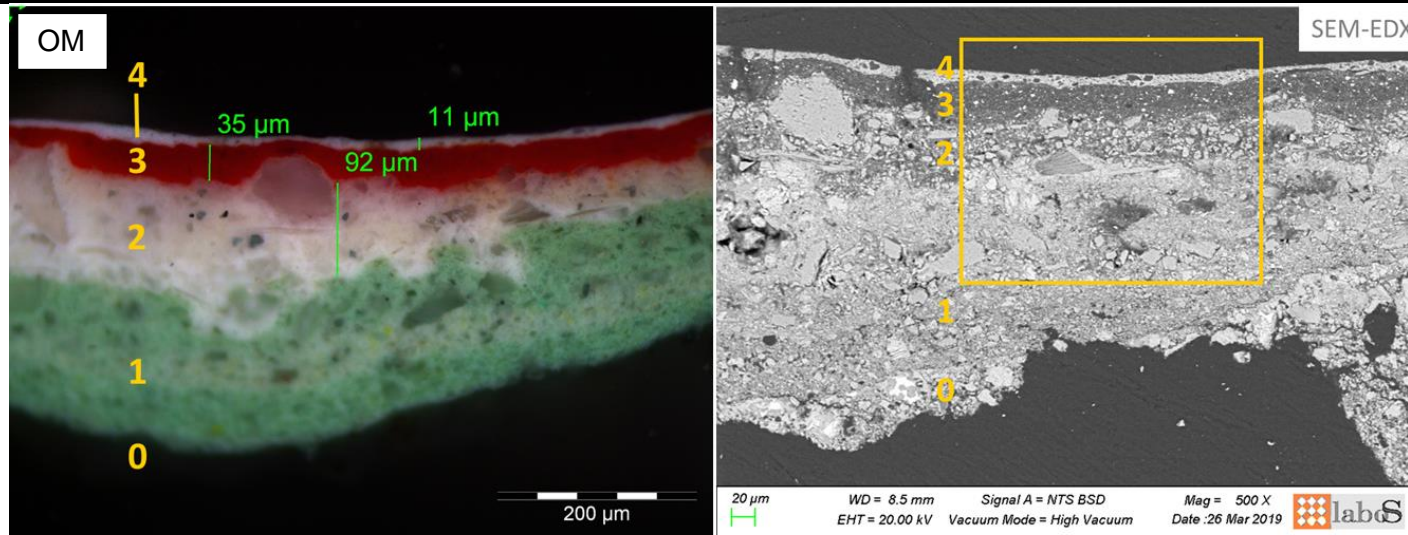
11	Opaque black paint layer	x		ATR-FTIR	Calcite, quartz	ATR-FTIR	Styrene-modified alkyd				
12	Shiny black paint layer	x		ATR-FTIR		ATR-FTIR Py-GC/MS	Styrene-modified alkyd				

* mortars, stone, metal ect.

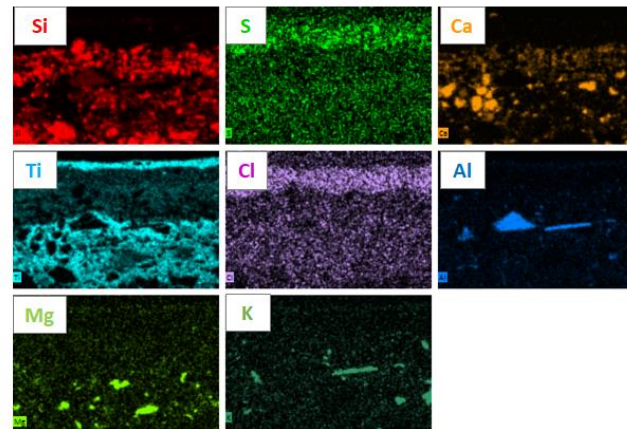
** Additional research or analyzes, for example: aging tests, colorimetry, pH...

STRATIGRAPHY OF THE MICROSAMPLES

Sample n°: OBJ4_9

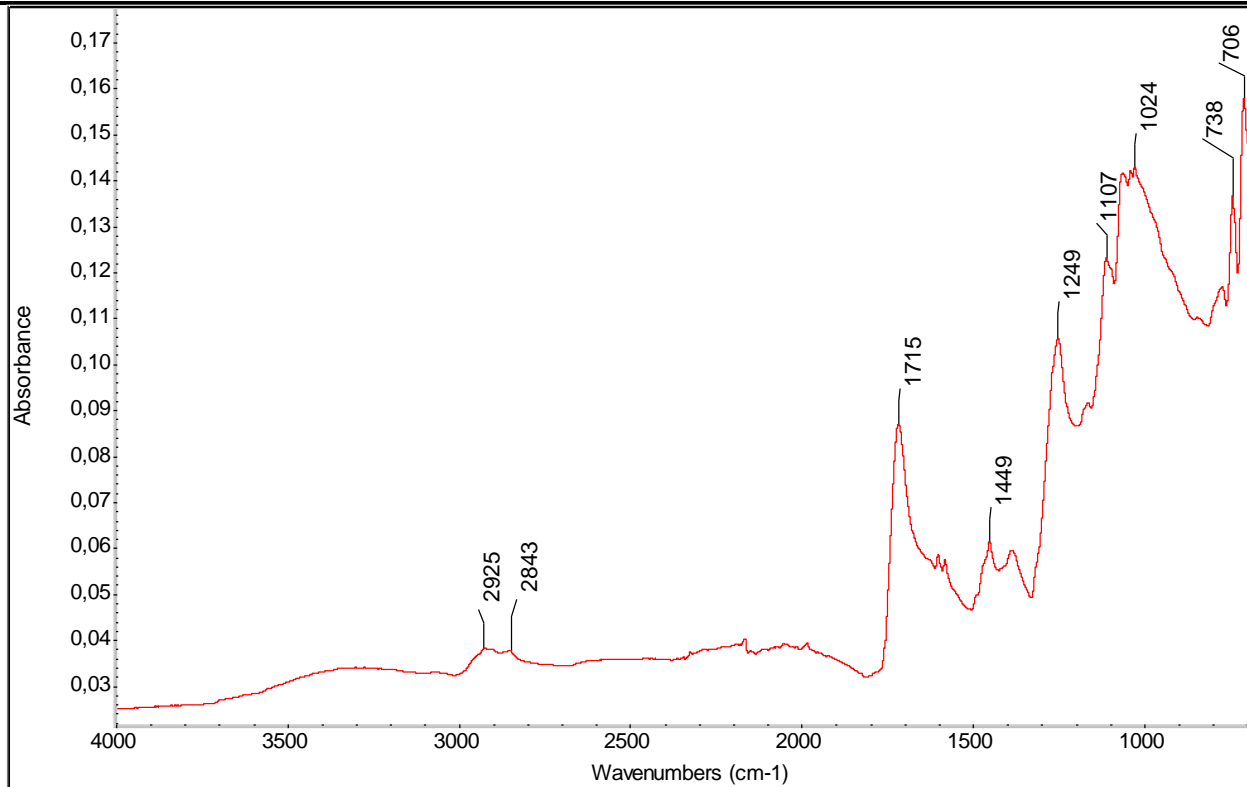


0 – support	Ca, Al, Si, (Ti), (P), (S), (Mg)
1 – green	Si, Ti, Ca, (Al), (Mg), (Cl) + quartz inclusion
2 – white	Si, Ca, Ti, (Al), (Cl)
3 – red	Organic? (Ti), (Cl), (Si) + aggregates of BaSO ₄
4 – white	Ti, (Si), (S), (Al), (Mg), (P), (Cl), (Ca)



FOURIER-TURNAM INFRARED SPECTROSCOPY (FTIR)

Sample n°: OBJ4_4

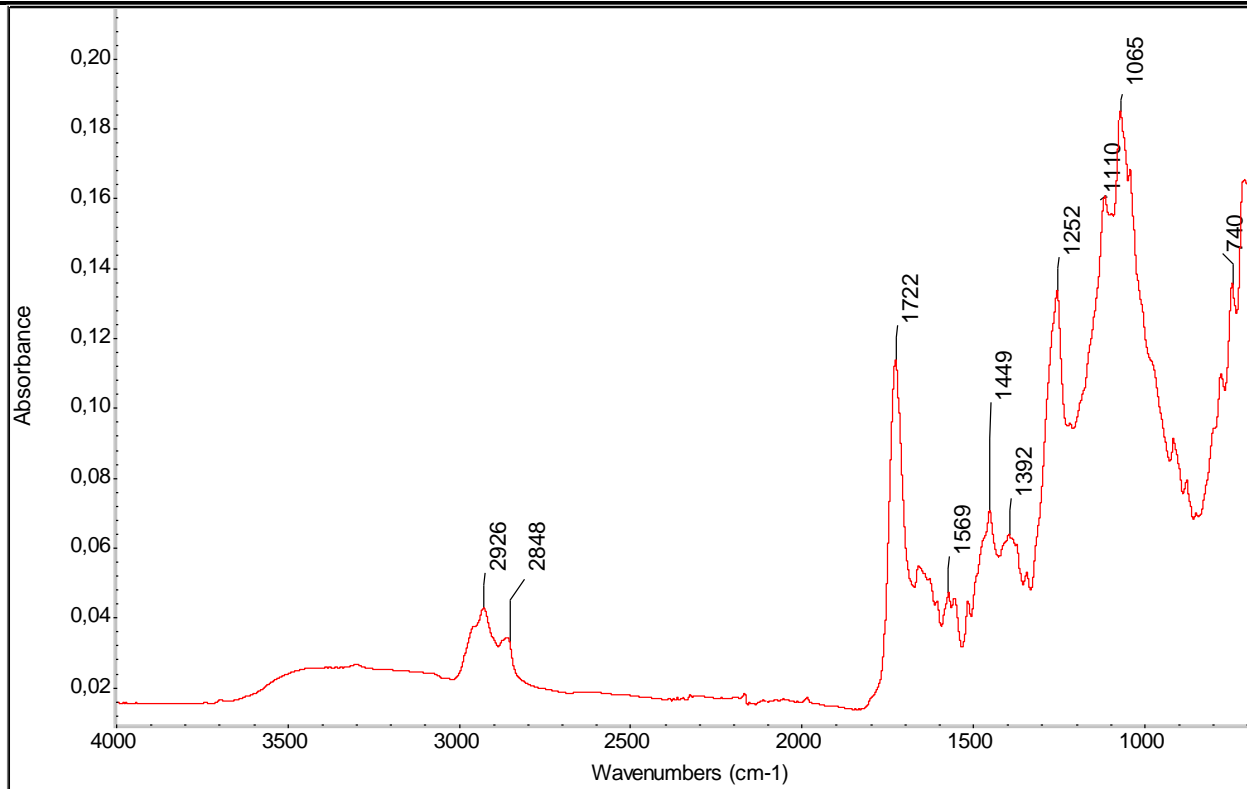


ASSIGNMENTS:

Alkyd: 2925 cm⁻¹, 2843 cm⁻¹, 1715 cm⁻¹,
 1600 cm⁻¹, 1583 cm⁻¹, 1492 cm⁻¹, 1449 cm⁻¹,
 1378 cm⁻¹, 1107 cm⁻¹, 1072 cm⁻¹, 738 cm⁻¹,
 706 cm⁻¹

Silicates: 900-1200 cm⁻¹

Sample n°: OBJ4_8



ASSIGNMENTS:

Alkyd: 2957 cm⁻¹, 2870 cm⁻¹, 1725 cm⁻¹, 1600 cm⁻¹, 1583 cm⁻¹, 1465 cm⁻¹, 1252 cm⁻¹, 1116 cm⁻¹, 1065 cm⁻¹, 742 cm⁻¹, 702 cm⁻¹

Silicates: 900-1200 cm⁻¹

This document was produced within the project ***Conservation of Art in Public Spaces (CAPuS)***.

Authors:

Moira Bertasa, Tommaso Poli, Chiara Riedo, Dominique Scarlone (University of Torino)

Paola Croveri, Chiara Ricci (Fondazione Centro Conservazione e Restauro “La Venaria Reale”)



**Education, Audiovisual and
Culture Executive Agency**
Erasmus+: Higher Education-Knowledge
Alliances, Bologna Support, Jean Monnet

CAPuS project has received funding from the
European Commission, Programme Erasmus+
Knowledge Alliances 2017, Project N°
588082-EPP-A-2017-1-IT-EPPKA2-KA

The European Commission's support for the production of this publication does not constitute an endorsement of the contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.